

A new species of *Zeuzera* (Lepidoptera: Cossidae) from Indonesia

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Abstract: *Zeuzera duffelsi* spec. nov. is described from Sulawesi (Indonesia). The male genitalia are figured.

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Introduction

During a PhD-study on Cossidae (Lepidoptera) the author discovered an undescribed species of *Zeuzera* Latreille, 1804 from Sulawesi, which had been confused with *Z. lineata* Gaede, 1833. The new species can easily be distinguished from the latter by a dark, V-shaped marking in the cell of the forewing. For a better understanding of this well-known and infamous genus (with many pest species), the new species is here described after the male (female still unknown), and a figure of the male genitalia is provided. The species has probably been overlooked earlier, as it seems to be not a pest species. It occurs in natural forests at probably somewhat higher altitudes.

Zeuzera duffelsi spec. nov.

(fig. 1-2)

Type material

Holotype: ♂, Indonesia, Sulawesi, Minahassa, Mt. Muajat, 1780 m, 8-9.x.1985, leg. M. R. de Jong (ZMAN). Paratypes (all Indonesia, Sulawesi): 1 ♂, Minahassa, Mt. Muajat, 1780 m, 8-9.x.1985, leg. M. R. de Jong (ZMAN); 1 ♂, Minahassa (coll. v. d. Bergh, ZMAN); 3 ♂, Minahassa, Dumoga-Bone National Park, 1000-1400 m, multistr. evergreen forest, monsoon forest, 9-15.v.1985 (at light), leg. R. de Jong (RMNH); 4 ♂ (two specimens with genitalia preparations in glycerin at pin), district Goa, Malino, 1100 m, vi.1938 (coll. van Groenendael, ZMAN); 2 ♂, Bonthain (coll. van Groenendael, ZMAN); 1 ♂, Ereng-Ereng, Bonthain, 500 m, ix.1938 (coll. van Groenendael, ZMAN); 2 ♂, Palu, Mt. Rangkunan, 1800 ft (BMNH); 1 ♂, Palu, Mt. Tompu, 2700 ft (BMNH); 1 ♂,

Puncak Paloppo Road, Rantepao Paloppo, 34 km E of Rantepao, 1000 m, 30.x.1993, leg. J. P. & M. J. Duffels (ZMAN); 1 ♂, 30 km NE of Enrekang, Mt. Rantemano, 1400 m, lower montane forest, 5.xi.1993, leg. J. P. & M. J. Duffels (ZMAN); 1 ♂, E side of Lake Matana kg., Salura, 450 m, logged rain forest, 15.x.1993, leg. J. P. & M. J. Duffels (ZMAN); 1 ♂, ridge between Lake Matana and Lake Mahalona, Salura, 600 m, rain forest, 14.x.1993, leg. J. P. & M. J. Duffels (ZMAN); 1 ♂, S of Batas, 60 km of Wotu, 1000 m, primary rain forest, 22.x.1993, leg. J. P. & M. J. Duffels (ZMAN).

Abbreviations: BMNH: The Natural History Museum, London, United Kingdom; RMNH: National Museum of Natural History, Leiden, The Netherlands; ZMAN: Zoological Museum, University of Amsterdam, Amsterdam, The Netherlands.

Description

Male. Overall appearance (fig. 1) typical of *Zeuzera*-species (see Roepke, 1957: 12-18, pls 1-2), and externally most closely resembling *Zeuzera lineata*. Wings are mainly white with many dark striae and dots. In external morphology the species shows the characteristics of *Zeuzera*, as described by Schoorl (1990).

Head. Frontal tuft short to moderately short and mainly dark fuscous. Tuft on vertex moderately short and white. Male antenna basally bipectinate for $\frac{2}{3}$ up to $\frac{1}{2}$, and distally filiform.

Thorax. Dorsally mainly white, with four pairs of dark fuscous spots. Legs partly fuscous. Many stout spines on tarsi, but these missing on fifth tarsomere. Fifth tarsomere is 1.5 to 2 times length of fourth one.

Wings. Wingspan: 5.0-6.5 cm. Forewing semi-transparent with mostly white scales,

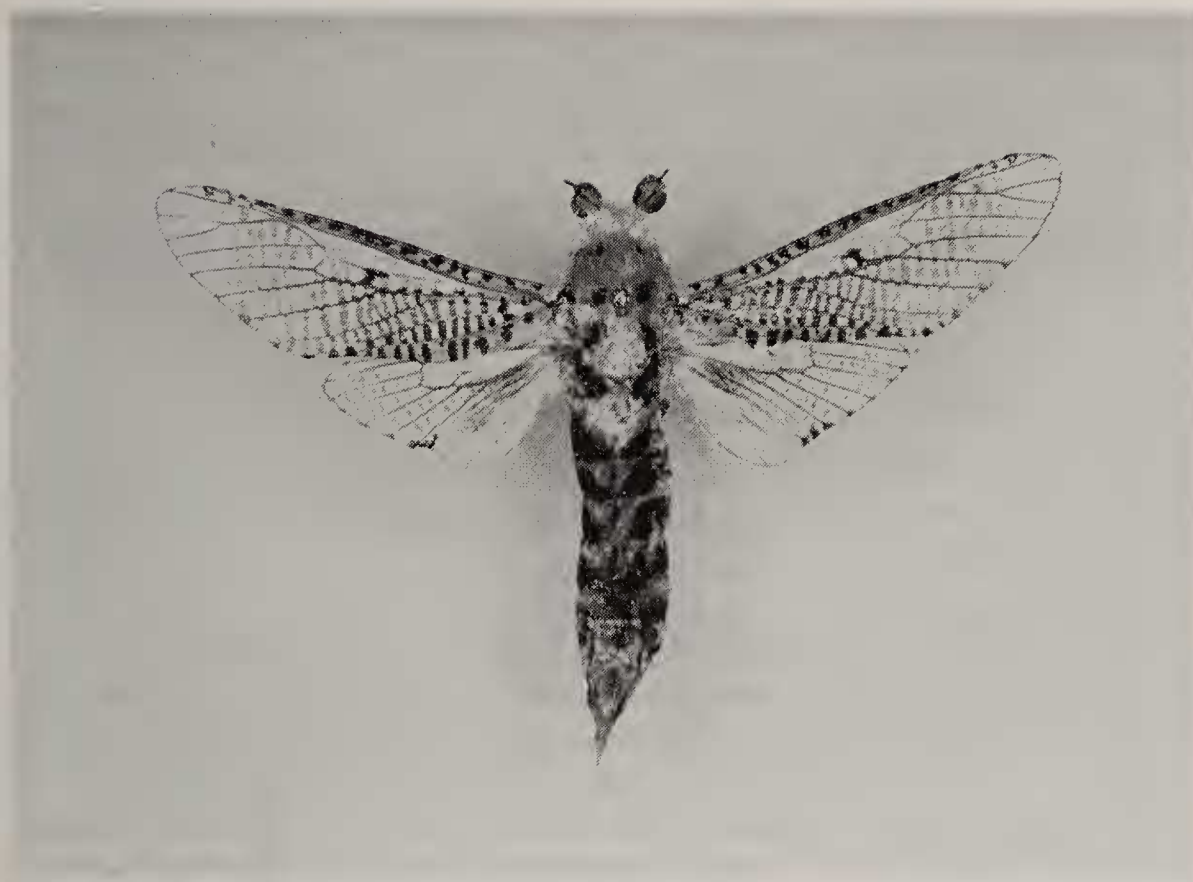


Fig. 1. *Zeuzera duffelsi* spec. nov., ♂, holotype (photo R. de Vos).

with many fuscous striae in between veins (reaching up to veins), with dark fuscous, V-shaped marking on branching of M in cell with a blue/green metallic lustre, and with many small spots along costa (more than in *Z. lineata*). Fringes very short. R1 branching off well before chorda. R3(4+5) connate up to very shortly stalked. Humeral plate $1\frac{1}{4}$ up to $1\frac{1}{2}$ times size of radial bridge. Ovoid sclerite approximately as long as radial bridge and rather wide (cf. Schoorl, 1990). Hindwing mainly white with a few dark spots along its margin, and M, CuA, CuP and A1+2 covered by dark fuscous scales in proximal half of wing (conspicuous). Anal region moderately elongate. Anal plate very to moderately short.

Abdomen. Mainly white with dorsally

five pairs of fuscous dots and distally three short, dark stripes.

Male genitalia (fig. 2). Genitalia very typical for a *Zeuzera*-species (cf. Roepke, 1957: pls 6-7); Holloway, 1986: 30-34, fig. 85-87). Uncus moderately long and moderately slender, pointed, and with rather short, bluntly pointed side lobes (viz. lora sensu Roepke, 1957). Transtilla rather wide (side view) and with almost parallel lateral margins. Aedeagus moderately and moderately slender, only slightly widened and more sclerotized proximally, and with rather short, moderately thin and bluntly pointed ornamental sclerite distally. Aedeagus lacks small spines. Valves moderately long and slender, more than twice as long as wide, and very little pointed.

Diagnosis

Zeuzera duffelsi differs from *Z. lineata* by the dark, V-shaped marking in cell on forewing, darkened veins partly in and near cell of hindwing, narrower valves in genitalia, a wider transtilla, and the lack of small spines in the aedeagus (cf. Roepke, 1957: pl. 2, fig. 1; pl. 7, fig. 2). *Zeuzera borneana* Roepke, 1957 occurs on Kalimantan, has more rounded dots on forewing which mostly do not reach the veins, lacks the characteristic V-spot, has more greenish lustre of dark markings, and has

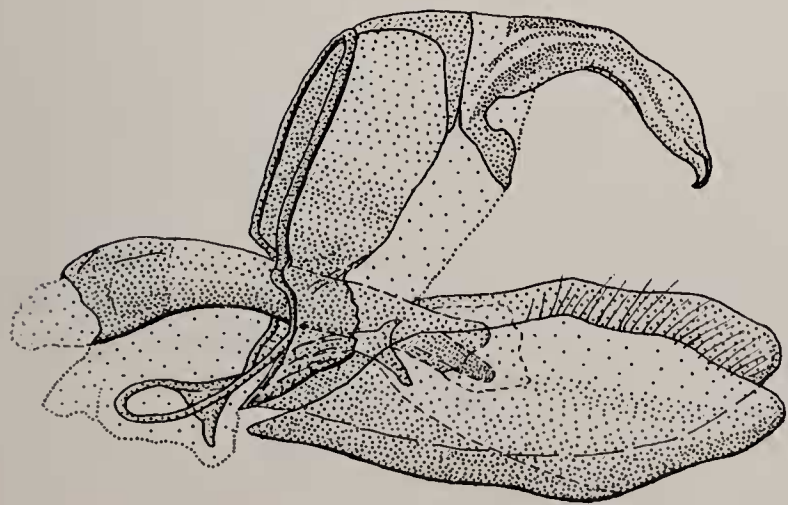


Fig. 2. *Zeuzera duffelsi* spec. nov., paratype, male genitalia (side view)

probably wider valves (cf. Roepke, 1957: pl. 6, fig. 8).

Etymology

The species is named after Dr J. P. Duffels (ZMAN), who works on south-east Asian Cicadoidea and their biogeography, and who together with his wife collected quite a few of the specimens.

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